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Turing Test 人工智能 AI A Modern Approach 人工智能与机器智能 Nature AlphaGo Zero 人工智能与机器智能 [1]

1949  leukotomy 

leukotomy

## Leukotomy BRIAN Initiative

## Leukotomy

1 personalities mental diseases personalities BRAIN Initiative

2016 leukotomy 2016 AlphaGo BRAIN Initiative

3. personality □ intelligence □ Walter Freeman □ personality □ intelligence □ [2] □

个性与智力的相互关系

leukotomy

Turing Test Nature AlphaGo Zero superhuman superhuman generic human superhuman superhuman

-peer review Peer review

leukotomy BRAIN Initiative

## Technological Singularity AlphaGo

Nature AlphaGo Zero AlphaGo Zero superhuman performance  
superhuman generic human superhuman superhuman

AlphaGo Zero AlphaGo Master superhuman AlphaGo Master  
generic superhuman game

AlphaGo Zero superhuman AlphaGo Zero  
superhuman

superhuman game superhuman

game superhuman

superhuman

Technological Singularity

Deepmind [3]

AlphaGo Master AlphaGo Master AlphaGo Master  
AlphaGo Zero AlphaGo Master AlphaGo Master  
AlphaGo Master

AlphaGo Zero AlphaGo Master AlphaGo Zero [4]  
AlphaGo Master 16 AlphaGo Zero 18  
AlphaGo Zero 14 16 45

1) Nature Magazime AlphaGo Deepmind AlphaGo Zero  
AlphaGo Master

2) AlphaGo Zero local trap AlphaGo Zero  
AlphaGo Zero superhuman

AlphaGo Zero AlphaGo Master AlphaGo Master  
AlphaGo Master AlphaGo Master [5] Nature  
AlphaGo Zero AlphaGo Master AlphaGo Master deep-learning  
AlphaGo Master

AlphaGo Zero [6] superhuman AlphaGo Zero □ superhuman

AlphaGo generic human Deepmind □ AlphaGo □ AlphaGo □ AlphaGo □ AlphaGo

AlphaGo □ AlphaGo [7] □ AlphaGo

Turing Machine □ deep-learning AlphaGo □ AlphaGo Zero □ AlphaGo Master □ AlphaGo Zero □ AlphaGo Zero

Universal approximation [8]

Socratic method

Turing Machine □ Universal approximation □ Turing Machine □ Universal approximation

Karl Popper □ Socratic method

Karl Popper □ [9]

Neurosciences □ human specific intelligence □

Alan Turing □ Geoffrey Hinton □ Demis Hassabis □ AlphaGo □

Demis Hassabis □ deep-learning □ reinforcement □ AlphaGo Zero □ generic □ superhuman □ Geoffrey Hinton

Turing Machine □ Turing Machine □ Geoffrey Hinton □ Turing Machine □ Alan Turing □

Universal approximation

笛卡尔的《方法论》、《沉思录》、《原理》、《第一哲学沉思录》

笛卡尔的《沉思录》Dialogue Concerning the Two Chief World Systems [10]笛卡尔的《沉思录》

笛卡尔的《沉思录》The Sceptical of Chemist笛卡尔的《沉思录》

达尔文的《物种起源》On the Origin of Species

达尔文的《物种起源》human specific intelligence达尔文的《物种起源》  
达尔文的《物种起源》big data 达尔文的《物种起源》big data BRAIN Initiative  
big data 达尔文的《物种起源》human level intelligence

Big data 达尔文的《物种起源》AlphaGo 达尔文的《物种起源》

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达尔文的《物种起源》 [11]

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Karl Popper 达尔文的《物种起源》达尔文的《物种起源》  
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Turing Test 达尔文的《物种起源》达尔文的《物种起源》  
达尔文的《物种起源》

AI: A Modern Approach driverless Car SAE level 5 human specific intelligence

Neurosciences human specific intelligence Technological Singularity [12]

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Technological Singularity □ AlphaGo Zero □ superhuman □ AI  
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Technological Singularity □ AlphaGo Zero □ superhuman □ AI [14] □

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[1] AI □ A Modern Approach □ Aristotle... was the first to formulate a precise set of laws governing the rational part of the mind."(On page 5) □

Galileo Galilei □ Dialogue Concerning the Two Chief World Systems □ Aristotle...  
Aristotle

Immanuel Kant □ Aristotle... was the first to formulate a precise set of laws governing the rational part of the mind" □

Gödel's theorems □ Aristotle... was the first to formulate a precise set of laws governing the rational part of the mind" □

AI  
AI  
"a precise set of laws governing the rational part of the mind" □

AI  
AI

[2] 9284 Leucotomy in England and Wales, 1942-1954 41 28 25 2 4

个性和智力的综合评价 personality intelligence综合评价 25分以上者为高分  
低分者为低分。个性和智力的综合评价与临床状态的综合评价 clinical condition 的综合评价 41分以上者为高分，低分者为低分。28分以上者为高分，低分者为低分。临床状态的综合评价与个性和智力的综合评价的综合评价

-renato-m-e-sabbatini-Even lobotomy's proponents admitted that only one third of the operated patients would improve, while one-third remained the same, and one-third got worst - Leucotomy in England and Wales, 1942-1954 - <http://www.cerebromente.org.br/n02/historia/lobotomy.htm>

one third would improve one-third remained the same clinical condition personality intelligence

个性智力 leucotomy BRAIN Initiative

[3] 『Cracking Go』 Deep Blue 『AlphaGo』 AlphaGo 『AlphaGo』

[4] <http://www.alphago-games.com/> AlphaGo Zero AlphaGo Zero <https://www.101weiqi.com/chessbook/player/38348/>

[6] <http://www.alphago-games.com/> Full Strength of Alphago Zero, i.e. Final Form 40 Blocks 20 Blocks Not Full Strength of Alphago Zero Alphago Zero

[7] 二〇一〇年十一月二日

[8] 2012 2015

“Go gaming is strictly defined within a very small space. Industrial automations are typically designed in well controlled environments, but not strictly defined. Car driving is regulated, but the environment is not well controlled”

2012

2012

[9]

[10] Dialogue Concerning the Two Chief Word Systems Socratic Method

2012

2012

2012

[11] talent pool

talent pool

[12] Universal approximation Technological Singularity AlphaGo Zero superhuman

[13] 1819 Ferdinand Schweikart

1830

Фердинанд Швайкарт Ferdinand Schweikart

[14] [http://www.mathematik.uni-hannover.de/~heine/geschichte/geschichte.html](#)  
[http://www.mathematik.uni-hannover.de/~heine/geschichte/geschichte.html](#)